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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,445	02/10/2000	Di Cao	26.0178	3849

7590 11/12/2004  
Attn Intellectual Property Counsel  
Schlumberger Oilfield Services  
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Sugar Land, TX 77478

EXAMINER

JONES, HUGH M

ART UNIT PAPER NUMBER

2128

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/501,445

Applicant(s)

CAO ET AL.

Examiner

Hugh Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/2/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-13 of U.S. Application 09/501,445 filed 2/10/2000 are pending.

#### **Claim Interpretation**

2. The broadest, most reasonable interpretation has been provided to the claims. The claimed invention appears to be directed at ray tracing based seismic modeling and analysis.

#### **Information Disclosure Statement**

3. Reference is made to GeoFrame in U. S. Patent 6,128,577 (of record), filed December 19, 1996. GeoFrame is relied upon for essential matter in the instant specification and is produced by Schlumberger (See lines 46-59, col. 8, for example of U. S. Patent 6,128,577).
4. Please provide, in the next response to the Office, the documents as discussed because they are material to the patentability of the claims. The user's manuals to related Schlumberger software products, including GeoFrame and GeoStore, were requested in the *last* Official Office Action – however, Applicants have only provided a later version of the manual.
5. Applicants are reminded of their duty to disclose as per 1.56.

#### **Specification**

6. The apparent improper attempt at incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is

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improper. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

7. Mere reference to another application, patent, or publication is not an incorporation of anything therein into application containing such reference for purposes of disclosure required by 35 U.S.C. 112; the purpose of "incorporation by reference" is to make one document become a part of another by referring to the former in the latter in such a manner that it is apparent that cited document is part of referencing document as if it were fully set out therein - *In re Serversky* 474 F.2d 671, 177 USPQ 144 (CCPA 1973):

**Claim Rejections - 35 USC § 112**

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claimed method, including the model and its implementation do not appear to be supported by the specification. The specification appears to rely on essential matter for support – the essential matter was not incorporated by reference.

**Response to Arguments**

10. Applicant's arguments filed 8/2/2004 have been fully considered but they are not persuasive.

**Response to Arguments - IDS (pg. 2, reply)**

11. Applicant's arguments filed 8/2/2004 have been fully considered. Applicants are thanked for the submission of the requested documents.

**Response to Arguments - Specification (pg. 2, reply)**

12. Applicant's arguments filed 8/2/2004 have been fully considered, but they are not persuasive. Applicants are reminded that the specification repeatedly refers potential readers to GeoFrame, available from Schlumberger GeoQuest, to carry out the claimed invention. See, for example, lines 6-12, page 5, specification. The matter is essential because the claimed invention can not be practiced without the GeoFrame teaching. Applicants reference the teaching as if it were incorporated by reference. Furthermore, in Applicant's arguments against the 112(1) rejections, they rely on the GeoFrame teaching. Therefore, the matter is, by Applicant's Own Admission, essential. Reliance on that material to buttress Applicant's arguments makes it an apparent improper attempt at incorporation. The apparent improper attempt at incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486

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F.2d 577, 179 USPQ 167 (CCPA 1973). This was pointed out to Applicants in the last official office action.

13. Mere reference to another application, patent, or publication is not an incorporation of anything therein into application containing such reference for purposes of disclosure required by 35 U.S.C. 112; the purpose of "incorporation by reference" is to make one document become a part of another by referring to the former in the latter in such a manner that it is apparent that cited document is part of referencing document as if it were fully set out therein - In re Serversky 474 F.2d 671, 177 USPQ 144 (CCPA 1973).

**Response to Arguments – 112(1) Paragraph (pp. 2-4, reply)**

14. Applicant's arguments filed 8/2/2004 have been fully considered, but they are not persuasive.

15. Applicants present a boilerplate analysis of the 112(1) rejections, and they are not persuasive. The Examiner, respectfully, does not find the claimed "model" and its implementation, as pointed out in the last official office action. Applicants are reminded that they have admitted that this matter is not incorporated.


Therefore, it is not present in the specification. *Applicant's reliance on this matter to bolster their position regarding 112(1) support for the claimed invention renders it essential matter.*

16. Applicants also refer to lines 4-10 on page 4 of the specification in order to buttress their arguments. That section merely suggests various attributes that a model *should* possess – it does not disclose any "model".

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17. Respectfully, the specification appears to only present a broad overview of how to implement GeoFrame. The claim(s) contains subject matter which was not described in the specification *in such a way* as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**Response to Arguments – Prior Art Rjections (pp. 4-5, reply)**

18. Applicant's arguments filed 8/2/2004 have been fully considered, and they are persuasive. The prior art of record does not disclose the combination of features as present in claim 1. In particular, limitations vi-vii, in the context of the claims are not disclosed ~~in~~ the prior art of record. 

**Conclusion**

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**21. Any inquiry concerning this communication or earlier communications from the examiner should be:**

**directed to:**

Dr. Hugh Jones telephone number (571) 272-3781, Monday-Thursday 0830 to 0700 ET,

**or** the examiner's supervisor, Jean Homere, telephone number (571) 272

3780. Any inquiry of a general nature or relating to the status of this

application should be directed to the Group receptionist, telephone

number (703) 305-3900.

**mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-9051 (for formal communications intended for entry)

**or** (703)308-1396 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Dr. Hugh Jones

Primary Patent Examiner

November 6, 2004

HUGH JONES Ph.D.  
PRIMARY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

